Wu Xu

List of Publications by Year
in descending order

247 papers	43,925 citations	2101 100 h-index	2033 205 g-index
256 all docs	256 docs citations	256 times ranked	21252 citing authors

#	Article	IF	Citations
1	Lithium metal anodes for rechargeable batteries. Energy and Environmental Science, 2014, 7, 513-537.	30.8	3,665
2	Pathways for practical high-energy long-cycling lithium metal batteries. Nature Energy, 2019, 4, 180-186.	39.5	2,101
3	High rate and stable cycling of lithium metal anode. Nature Communications, 2015, 6, 6362.	12.8	1,954
4	Dendrite-Free Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. Journal of the American Chemical Society, 2013, 135, 4450-4456.	13.7	1,736
5	In Situ Observation of the Electrochemical Lithiation of a Single SnO ₂ Nanowire Electrode. Science, 2010, 330, 1515-1520.	12.6	1,430
6	Advancing Lithium Metal Batteries. Joule, 2018, 2, 833-845.	24.0	1,052
7	Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. Nature Energy, 2017, 2, .	39.5	1,048
8	Ionic Liquids:Â Ion Mobilities, Glass Temperatures, and Fragilities. Journal of Physical Chemistry B, 2003, 107, 6170-6178.	2.6	960
9	Hierarchically Porous Graphene as a Lithiumâ€“Air Battery Electrode. Nano Letters, 2011, 11, 5071-5078.	9.1	943
10	Ionic Liquids by Proton Transfer:â€‰ Vapor Pressure, Conductivity, and the Relevance of Î”pKa from Aqueous Solutions. Journal of the American Chemical Society, 2003, 125, 15411-15419.	13.7	841
11	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. Nature Energy, 2018, 3, 739-746.	39.5	767
12	Highâ€Voltage Lithiumâ€Metal Batteries Enabled by Localized Highâ€Concentration Electrolytes. Advanced Materials, 2018, 30, e1706102.	21.0	761
13	Accurate Determination of Coulombic Efficiency for Lithium Metal Anodes and Lithium Metal Batteries. Advanced Energy Materials, 2018, 8, 1702097.	19.5	704
14	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. CheM, 2018, 4, 1877-1892.	11.7	628
15	Lewis Acidâ€“Base Interactions between Polysulfides and Metal Organic Framework in Lithium Sulfur Batteries. Nano Letters, 2014, 14, 2345-2352.	9.1	623
16	Monolithic solidâ€“electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	39.5	621
17	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	24.0	598
18	Solvent-Free Electrolytes with Aqueous Solution-Like Conductivities. Science, 2003, 302, 422-425.	12.6	506

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19	Anodeâ€Free Rechargeable Lithium Metal Batteries. Advanced Functional Materials, 2016, 26, 7094-7102.	14.9	495
20	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. Nature Energy, 2019, 4, 551-559.	39.5	492
21	Making Liâ€Air Batteries Rechargeable: Material Challenges. Advanced Functional Materials, 2013, 23, 987-1004.	14.9	477
22	Self-smoothing anode for achieving high-energy lithium metal batteries under realistic conditions. Nature Nanotechnology, 2019, 14, 594-601.	31.5	451
23	High-Efficiency Lithium Metal Batteries with Fire-Retardant Electrolytes. Joule, 2018, 2, 1548-1558.	24.0	436
24	Anodes for Rechargeable Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2015, 5, 1402273.	19.5	423
25	Lithium Metal Anodes with Nonaqueous Electrolytes. Chemical Reviews, 2020, 120, 13312-13348.	47.7	393
26	TEMPOâ€Based Catholyte for Highâ€Energy Density Nonaqueous Redox Flow Batteries. Advanced Materials, 2014, 26, 7649-7653.	21.0	387
27	LiBOB as Salt for Lithium-Ion Batteries:A Possible Solution for High Temperature Operation. Electrochemical and Solid-State Letters, 2002, 5, A26.	2.2	358
28	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. Joule, 2019, 3, 1094-1105.	24.0	358
29	Dendrite-Free Lithium Deposition with Self-Aligned Nanorod Structure. Nano Letters, 2014, 14, 6889-6896.	9.1	326
30	In Situ TEM Study of Lithiation Behavior of Silicon Nanoparticles Attached to and Embedded in a Carbon Matrix. ACS Nano, 2012, 6, 8439-8447.	14.6	321
31	Effect of entropy change of lithium intercalation in cathodes and anodes on Li-ion battery thermal management. Journal of Power Sources, 2010, 195, 3720-3729.	7.8	313
32	Optimization of Air Electrode for Li/Air Batteries. Journal of the Electrochemical Society, 2010, 157, A487.	2.9	308
33	New Insights on the Structure of Electrochemically Deposited Lithium Metal and Its Solid Electrolyte Interphases via Cryogenic TEM. Nano Letters, 2017, 17, 7606-7612.	9.1	308
34	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. ACS Energy Letters, 2019, 4, 896-902.	17.4	302
35	High Voltage Operation of Niâ€Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. Advanced Energy Materials, 2018, 8, 1800297.	19.5	298
36	Dendrite-free Li deposition using trace-amounts of water as an electrolyte additive. Nano Energy, 2015, 15, 135-144.	16.0	297

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37	Balancing interfacial reactions to achieve long cycle life in high-energy lithium metal batteries. Nature Energy, 2021, 6, 723-732.	39.5	285
38	Hollow coreâ€"shell structured porous Siâ€"C nanocomposites for Li-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 11014.	6.7	280
39	Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. Joule, 2018, 2, 110-124.	24.0	280
40	Real-time mass spectrometric characterization of the solidâ€"electrolyte interphase of a lithium-ion battery. Nature Nanotechnology, 2020, 15, 224-230.	31.5	280
41	Radical Compatibility with Nonaqueous Electrolytes and Its Impact on an Allâ€Organic Redox Flow Battery. Angewandte Chemie - International Edition, 2015, 54, 8684-8687.	13.8	271
42	Recent Progress in Understanding Solid Electrolyte Interphase on Lithium Metal Anodes. Advanced Energy Materials, 2021, 11, 2003092.	19.5	271
43	Weakly Coordinating Anions, and the Exceptional Conductivity of Their Nonaqueous Solutions. Electrochemical and Solid-State Letters, 2001, 4, E1.	2.2	269
44	In Situ Transmission Electron Microscopy Observation of Microstructure and Phase Evolution in a SnO₂Nanowire during Lithium Intercalation. Nano Letters, 2011, 11, 1874-1880.	9.1	266
45	Demonstration of an Electrochemical Liquid Cell for Operando Transmission Electron Microscopy Observation of the Lithiation/Delithiation Behavior of Si Nanowire Battery Anodes. Nano Letters, 2013, 13, 6106-6112.	9.1	265
46	Observation and Quantification of Nanoscale Processes in Lithium Batteries by Operando Electrochemical (S)TEM. Nano Letters, 2015, 15, 2168-2173.	9.1	264
47	Effects of Carbonate Solvents and Lithium Salts on Morphology and Coulombic Efficiency of Lithium Electrode. Journal of the Electrochemical Society, 2013, 160, A1894-A1901.	2.9	260
48	A Localized High-Concentration Electrolyte with Optimized Solvents and Lithium Difluoro(oxalate)borate Additive for Stable Lithium Metal Batteries. ACS Energy Letters, 2018, 3, 2059-2067.	17.4	257
49	Reviewâ€"Localized High-Concentration Electrolytes for Lithium Batteries. Journal of the Electrochemical Society, 2021, 168, 010522.	2.9	257
50	In Situ TEM Investigation of Congruent Phase Transition and Structural Evolution of Nanostructured Silicon/Carbon Anode for Lithium Ion Batteries. Nano Letters, 2012, 12, 1624-1632.	9.1	256
51	Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient Highâ€Concentration Electrolyte Layer. Advanced Energy Materials, 2016, 6, 1502151.	19.5	236
52	Investigation on the charging process of Li2O2-based air electrodes in Liâ€"O2 batteries with organic carbonate electrolytes. Journal of Power Sources, 2011, 196, 3894-3899.	7.8	229
53	Ionic Liquids of Chelated Orthoborates as Model Ionic Glassformers. Journal of Physical Chemistry B, 2003, 107, 11749-11756.	2.6	217
54	Anthraquinone with tailored structure for a nonaqueous metalâ€"organic redox flow battery. Chemical Communications, 2012, 48, 6669.	4.1	217

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55	Origin of lithium whisker formation and growth under stress. Nature Nanotechnology, 2019, 14, 1042-1047.	31.5	211
56	Effects of Electrolyte Salts on the Performance of Liâ€"O₂ Batteries. Journal of Physical Chemistry C, 2013, 117, 2635-2645.	3.1	204
57	A High-Current, Stable Nonaqueous Organic Redox Flow Battery. ACS Energy Letters, 2016, 1, 705-711.	17.4	202
58	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	48.7	201
59	Li⁺-Desolvation Dictating Lithium-Ion Batteryâ€™s Low-Temperature Performances. ACS Applied Materials & Interfaces, 2017, 9, 42761-42768.	8.0	200
60	Reaction mechanisms for the limited reversibility of Liâ€"O2 chemistry in organic carbonate electrolytes. Journal of Power Sources, 2011, 196, 9631-9639.	7.8	198
61	Investigation of the rechargeability of Liâ€"O2 batteries in non-aqueous electrolyte. Journal of Power Sources, 2011, 196, 5674-5678.	7.8	197
62	The stability of organic solvents and carbon electrode in nonaqueous Li-O2 batteries. Journal of Power Sources, 2012, 215, 240-247.	7.8	197
63	Role of inner solvation sheath within saltâ€"solvent complexes in tailoring electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28603-28613.	7.1	191
64	Ambient operation of Li/Air batteries. Journal of Power Sources, 2010, 195, 4332-4337.	7.8	189
65	Enhanced charging capability of lithium metal batteries based on lithium bis(trifluoromethanesulfonyl)imide-lithium bis(oxalato)borate dual-salt electrolytes. Journal of Power Sources, 2016, 318, 170-177.	7.8	186
66	Towards Highâ€Performance Nonaqueous Redox Flow Electrolyte Via Ionic Modification of Active Species. Advanced Energy Materials, 2015, 5, 1400678.	19.5	181
67	Highâ€Performance Silicon Anodes Enabled By Nonflammable Localized Highâ€Concentration Electrolytes. Advanced Energy Materials, 2019, 9, 1900784.	19.5	175
68	Nano-structured Li3V2(PO4)3/carbon composite for high-rate lithium-ion batteries. Electrochemistry Communications, 2010, 12, 1674-1677.	4.7	173
69	Optimization of Nonaqueous Electrolytes for Primary Lithium/Air Batteries Operated in Ambient Environment. Journal of the Electrochemical Society, 2009, 156, A773.	2.9	166
70	Guided Lithium Metal Deposition and Improved Lithium Coulombic Efficiency through Synergistic Effects of LiAsF₆ and Cyclic Carbonate Additives. ACS Energy Letters, 2018, 3, 14-19.	17.4	161
71	Conductive Rigid Skeleton Supported Silicon as High-Performance Li-Ion Battery Anodes. Nano Letters, 2012, 12, 4124-4130.	9.1	160
72	Revealing the reaction mechanisms of Liâ€"O2 batteries using environmental transmission electron microscopy. Nature Nanotechnology, 2017, 12, 535-539.	31.5	160

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73	Advanced Electrolytes for Fastâ€Charging Highâ€Voltage Lithiumâ€Ion Batteries in Wideâ€Temperature Range. Advanced Energy Materials, 2020, 10, 2000368.	19.5	159
74	Strategies towards enabling lithium metal in batteries: interphases and electrodes. Energy and Environmental Science, 2021, 14, 5289-5314.	30.8	156
75	Wide-Temperature Electrolytes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 18826-18835.	8.0	150
76	Advanced intermediate-temperature Naâ€"S battery. Energy and Environmental Science, 2013, 6, 299-306.	30.8	149
77	Effects of Nonaqueous Electrolytes on the Performance of Lithium/Air Batteries. Journal of the Electrochemical Society, 2010, 157, A219.	2.9	148
78	Lithium Difluorophosphate as a Dendrite-Suppressing Additive for Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2018, 10, 22201-22209.	8.0	143
79	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. Advanced Functional Materials, 2017, 27, 1704391.	14.9	141
80	Probing the Degradation Mechanisms in Electrolyte Solutions for Li-Ion Batteries by in Situ Transmission Electron Microscopy. Nano Letters, 2014, 14, 1293-1299.	9.1	137
81	A review on the stability and surface modification of layered transition-metal oxide cathodes. Materials Today, 2021, 46, 155-182.	14.2	132
82	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	131
83	Enhanced performance of graphite anode materials by AlF3 coating for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 12745.	6.7	129
84	Factors affecting the battery performance of anthraquinone-based organic cathode materials. Journal of Materials Chemistry, 2012, 22, 4032.	6.7	126
85	Reduction Mechanism of Fluoroethylene Carbonate for Stable Solidâ€"Electrolyte Interphase Film on Silicon Anode. ChemSusChem, 2014, 7, 549-554.	6.8	126
86	Dendriteâ€Free and Performanceâ€Enhanced Lithium Metal Batteries through Optimizing Solvent Compositions and Adding Combinational Additives. Advanced Energy Materials, 2018, 8, 1703022.	19.5	123
87	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li||LiCoO₂ Batteries. Advanced Materials, 2020, 32, e2004898.	21.0	123
88	Highâ€Power Lithium Metal Batteries Enabled by Highâ€Concentration Acetonitrileâ€Based Electrolytes with Vinylene Carbonate Additive. Advanced Functional Materials, 2020, 30, 2001285.	14.9	121
89	Effects of Cesium Cations in Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. Journal of Physical Chemistry C, 2014, 118, 4043-4049.	3.1	117
90	Effect of the Anion Activity on the Stability of Li Metal Anodes in Lithiumâ€Sulfur Batteries. Advanced Functional Materials, 2016, 26, 3059-3066.	14.9	117

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91	In situ transmission electron microscopy and spectroscopy studies of interfaces in Li ion batteries: Challenges and opportunities. Journal of Materials Research, 2010, 25, 1541-1547.	2.6	112
92	Nanosheet-structured LiV3O8 with high capacity and excellent stability for high energy lithium batteries. Journal of Materials Chemistry, 2011, 21, 10077.	6.7	112
93	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. ACS Energy Letters, 2019, 4, 2529-2534.	17.4	112
94	Effects of Imideâ€“Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2018, 10, 2469-2479.	8.0	110
95	Stabilization of Silicon Anode for Li-Ion Batteries. Journal of the Electrochemical Society, 2010, 157, A1047.	2.9	108
96	Enhanced Stability of Li Metal Anodes by Synergetic Control of Nucleation and the Solid Electrolyte Interphase. Advanced Energy Materials, 2019, 9, 1901764.	19.5	108
97	Thermal stability and phase transformation of electrochemically charged/discharged LiMnPO4 cathode for Li-ion batteries. Energy and Environmental Science, 2011, 4, 4560.	30.8	107
98	Template free synthesis of LiV₃O₈nanorods as a cathode material for high-rate secondary lithium batteries. Journal of Materials Chemistry, 2011, 21, 1153-1161.	6.7	105
99	Enhanced Cycling Stability of Rechargeable Liâ€“O₂ Batteries Using Highâ€Concentration Electrolytes. Advanced Functional Materials, 2016, 26, 605-613.	14.9	104
100	Complete Decomposition of Li₂CO₃ in Liâ€“O₂ Batteries Using Ir/B₄C as Noncarbon-Based Oxygen Electrode. Nano Letters, 2017, 17, 1417-1424.	9.1	104
101	Stability of polymer binders in Liâ€“O 2 batteries. Journal of Power Sources, 2013, 243, 899-907.	7.8	102
102	Atomic to Nanoscale Origin of Vinylene Carbonate Enhanced Cycling Stability of Lithium Metal Anode Revealed by Cryo-Transmission Electron Microscopy. Nano Letters, 2020, 20, 418-425.	9.1	102
103	Applications of XPS in the characterization of Battery materials. Journal of Electron Spectroscopy and Related Phenomena, 2019, 231, 2-10.	1.7	101
104	Stabilization of Li Metal Anode in DMSOâ€Based Electrolytes via Optimization of Saltâ€“Solvent Coordination for Liâ€“O₂ Batteries. Advanced Energy Materials, 2017, 7, 1602605.	19.5	99
105	Oxygen-selective immobilized liquid membranes for operation of lithium-air batteries in ambient air. Journal of Power Sources, 2010, 195, 7438-7444.	7.8	96
106	Simultaneous Stabilization of LiNi_{0.76}Mn_{0.14}Co_{0.10}O₂ Cathode and Lithium Metal Anode by Lithium Bis(oxalato)borate as Additive. ChemSusChem, 2018, 11, 2211-2220.	6.8	89
107	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. ACS Energy Letters, 2018, 3, 2921-2930.	17.4	89
108	Ultrathin Li₄Ti₅O₁₂ Nanosheets as Anode Materials for Lithium and Sodium Storage. ACS Applied Materials & Interfaces, 2016, 8, 16718-16726.	8.0	87

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109	Mixed salts of LiTFSI and LiBOB for stable LiFePO4-based batteries at elevated temperatures. Journal of Materials Chemistry A, 2014, 2, 2346.	10.3	85
110	Crown Ethers in Nonaqueous Electrolytes for Lithium/Air Batteries. Electrochemical and Solid-State Letters, 2010, 13, A48.	2.2	82
111	Synthesis and Characterization of Lithium Manganese Phosphate by a Precipitation Method. Journal of the Electrochemical Society, 2010, 157, A142.	2.9	76
112	In Situ Mass Spectrometric Determination of Molecular Structural Evolution at the Solid Electrolyte Interphase in Lithium-Ion Batteries. Nano Letters, 2015, 15, 6170-6176.	9.1	73
113	High Li[sup +] Self-Diffusivity and Transport Number in Novel Electrolyte Solutions. Journal of the Electrochemical Society, 2001, 148, A1352.	2.9	70
114	An Electrically Switchable Metal-Organic Framework. Scientific Reports, 2014, 4, 6114.	3.3	70
115	Lithium Metal Anodes and Rechargeable Lithium Metal Batteries. Springer Series in Materials Science, 2017, , .	0.6	70
116	Advanced Lowâ€Flammable Electrolytes for Stable Operation of Highâ€Voltage Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 12999-13006.	13.8	70
117	Reinvestigation on the state-of-the-art nonaqueous carbonate electrolytes for 5ÂV Li-ion battery applications. Journal of Power Sources, 2012, 213, 304-316.	7.8	69
118	Novel Polyanionic Solid Electrolytes with Weak Coulomb Traps and Controllable Caps and Spacers. Chemistry of Materials, 2002, 14, 401-409.	6.7	67
119	High Capacity Pouch-Type Liâ€"Air Batteries. Journal of the Electrochemical Society, 2010, 157, A760.	2.9	67
120	High-performance anode based on porous Co3O4 nanodiscs. Journal of Power Sources, 2014, 255, 125-129.	7.8	67
121	The Impact of Li Grain Size on Coulombic Efficiency in Li Batteries. Scientific Reports, 2016, 6, 34267.	3.3	67
122	Optimized Al Doping Improves Both Interphase Stability and Bulk Structural Integrity of Ni-Rich NMC Cathode Materials. ACS Applied Energy Materials, 2020, 3, 3369-3377.	5.1	66
123	B4C as a stable non-carbon-based oxygen electrode material for lithium-oxygen batteries. Nano Energy, 2017, 33, 195-204.	16.0	65
124	Polymerâ€inâ€â€œQuasiâ€Ionic Liquidâ€•Electrolytes for Highâ€Voltage Lithium Metal Batteries. Advanced Energy Materials, 2019, 9, 1902108.	19.5	65
125	Optimization of fluorinated orthoformate based electrolytes for practical high-voltage lithium metal batteries. Energy Storage Materials, 2021, 34, 76-84.	18.0	65
126	Air Dehydration Membranes for Nonaqueous Lithiumâ€"Air Batteries. Journal of the Electrochemical Society, 2010, 157, A940.	2.9	63

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127	One dimensional and coaxial polyaniline@tin dioxide@multi-wall carbon nanotube as advanced conductive additive free anode for lithium ion battery. Chemical Engineering Journal, 2018, 334, 162-171.	12.7	63
128	The Mechanisms of Oxygen Reduction and Evolution Reactions in Nonaqueous Lithiumâ€"Oxygen Batteries. ChemSusChem, 2014, 7, 2436-2440.	6.8	62
129	Anion-Tunable Properties and Electrochemical Performance of Functionalized Ferrocene Compounds. Scientific Reports, 2015, 5, 14117.	3.3	62
130	Electrochemically Formed Ultrafine Metal Oxide Nanocatalysts for High-Performance Lithiumâ€"Oxygen Batteries. Nano Letters, 2016, 16, 4932-4939.	9.1	62
131	Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. ACS Nano, 2020, 14, 4601-4608.	14.6	61
132	A Fusible Orthoborate Lithium Salt with High Conductivity in Solutions. Electrochemical and Solid-State Letters, 1999, 3, 366.	2.2	59
133	Dendrimerâ€Encapsulated Ruthenium Oxide Nanoparticles as Catalysts in Lithiumâ€Oxygen Batteries. Advanced Functional Materials, 2014, 24, 7510-7519.	14.9	59
134	Preparation and electrochemical investigation of Li2CoPO4F cathode material for lithium-ion batteries. Journal of Power Sources, 2011, 196, 2241-2245.	7.8	58
135	Enhanced Stability of Lithium Metal Anode by using a 3D Porous Nickel Substrate. ChemElectroChem, 2018, 5, 761-769.	3.4	58
136	Surface and structural stabilities of carbon additives in high voltage lithium ion batteries. Journal of Power Sources, 2013, 227, 211-217.	7.8	55
137	Current Density Regulated Atomic to Nanoscale Process on Li Deposition and Solid Electrolyte Interphase Revealed by Cryogenic Transmission Electron Microscopy. ACS Nano, 2020, 14, 8766-8775.	14.6	54
138	Ionic Conductivity and Electrochemical Stability of Poly[oligo(ethylene glycol)oxalate]â^'Lithium Salt Complexes. Chemistry of Materials, 2001, 13, 575-580.	6.7	53
139	Optimized Operating Range for Large-Format LiFePO₄/Graphite Batteries. Journal of the Electrochemical Society, 2014, 161, A336-A341.	2.9	53
140	Electrolyte Regulating toward Stabilization of Cobalt-Free Ultrahigh-Nickel Layered Oxide Cathode in Lithium-Ion Batteries. ACS Energy Letters, 2021, 6, 1324-1332.	17.4	53
141	Stabilizing ultrahigh-nickel layered oxide cathodes for high-voltage lithium metal batteries. Materials Today, 2021, 44, 15-24.	14.2	53
142	Simply AlF3-treated Li4Ti5O12 composite anode materials for stable and ultrahigh power lithium-ion batteries. Journal of Power Sources, 2013, 236, 169-174.	7.8	51
143	Vibrational Spectroscopy and ab Initio Studies of Lithium Bis(oxalato)borate (LiBOB) in Different Solvents. Journal of Physical Chemistry A, 2006, 110, 11467-11472.	2.5	50
144	Hybrid Air-Electrode for Li/Air Batteries. Journal of the Electrochemical Society, 2010, 157, A294.	2.9	50

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145	Structures of Orthoborate Anions and Physical Properties of Their Lithium Salt Nonaqueous Solutions. Journal of the Electrochemical Society, 2003, 150, E74.	2.9	49
146	â€œPolyMOBâ€â€“lithium salt complexes: from salt-in-polymer to polymer-in-salt electrolytes. Electrochimica Acta, 2003, 48, 2037-2045.	5.2	47
147	LiMOB, an Unsymmetrical Nonaromatic Orthoborate Salt for Nonaqueous Solution Electrochemical Applications. Journal of the Electrochemical Society, 2004, 151, A632.	2.9	47
148	Preparation and characterization of novel â€œpolyMOBâ€•polyanionic solid electrolytes with weak coulomb traps. Solid State Ionics, 2002, 147, 295-301.	2.7	45
149	In-Situ Electrochemical Transmission Electron Microscopy for Battery Research. Microscopy and Microanalysis, 2014, 20, 484-492.	0.4	45
150	Optimized Electrolyte with High Electrochemical Stability and Oxygen Solubility for Lithiumâ€“Oxygen and Lithiumâ€“Air Batteries. ACS Energy Letters, 2020, 5, 2182-2190.	17.4	45
151	A three-dimensional macroporous Cu/SnO2 composite anode sheet prepared via a novel method. Journal of Power Sources, 2010, 195, 7403-7408.	7.8	44
152	Effects of cell positive cans and separators on the performance of high-voltage Li-ion batteries. Journal of Power Sources, 2012, 213, 160-168.	7.8	44
153	Formation of Interfacial Layer and Long-Term Cyclability of Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2014, 6, 14141-14151.	8.0	44
154	Constructing Robust Electrode/Electrolyte Interphases to Enable Wide Temperature Applications of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 21496-21505.	8.0	44
155	Effects of Propylene Carbonate Content in CsPF₆-Containing Electrolytes on the Enhanced Performances of Graphite Electrode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 5715-5722.	8.0	43
156	The Role of Cesium Cation in Controlling Interphasial Chemistry on Graphite Anode in Propylene Carbonate-Rich Electrolytes. ACS Applied Materials & Interfaces, 2015, 7, 20687-20695.	8.0	41
157	Investigation of Ionâ€“Solvent Interactions in Nonaqueous Electrolytes Using in Situ Liquid SIMS. Analytical Chemistry, 2018, 90, 3341-3348.	6.5	41
158	A highly stable host for lithium metal anode enabled by Li9Al4-Li3N-AlN structure. Nano Energy, 2019, 59, 110-119.	16.0	39
159	Effects of Fluorinated Diluents in Localized Highâ€Concentration Electrolytes for Lithiumâ€“Oxygen Batteries. Advanced Functional Materials, 2021, 31, 2002927.	14.9	39
160	Enhanced Cyclability of Lithiumâ€“Oxygen Batteries with Electrodes Protected by Surface Films Induced via In Situ Electrochemical Process. Advanced Energy Materials, 2018, 8, 1702340.	19.5	38
161	Electrocatalytic properties of poly(3,4-ethylenedioxythiophene) (PEDOT) in Li-O2 battery. Electrochemistry Communications, 2013, 29, 63-66.	4.7	36
162	An Approach to Make Macroporous Metal Sheets as Current Collectors for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2010, 157, A765.	2.9	35

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163	Electrode Edge Effects and the Failure Mechanism of Lithiumâ€Metal Batteries. ChemSusChem, 2018, 11, 3821-3828.	6.8	35
164	Enabling Ether-Based Electrolytes for Long Cycle Life of Lithium-Ion Batteries at High Charge Voltage. ACS Applied Materials & Interfaces, 2020, 12, 54893-54903.	8.0	35
165	Inâ€…Situâ€Grown ZnCo₂O₄ on Singleâ€Walled Carbon Nanotubes as Air Electrode Materials for Rechargeable Lithiumâ€"Oxygen Batteries. ChemSusChem, 2015, 8, 3697-3703.	6.8	34
166	Direct Visualization of Li Dendrite Effect on LiCoO₂ Cathode by In Situ TEM. Small, 2018, 14, e1803108.	10.0	34
167	Novel Alternating Comblike Copolymer Electrolytes with Single Lithium Ionic Conduction. Chemistry of Materials, 1998, 10, 1951-1957.	6.7	32
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239	Stability of Li Metal Anode and Calendar Life of Lithium Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 92-92.	0.0	0
240	(Invited) Directions of High Energy Batteries and Status of Battery500 Consortium. ECS Meeting Abstracts, 2020, MA2020-02, 29-29.	0.0	0
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246	(Digital Presentation) Effects of Solvents and Additives in Non-Conventional Liquid Electrolytes for Lithium-Ion Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 193-193.	0.0	0
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